

Know Your Lidar Data

Assessing the Accuracy/Quality
Integrating Other Sources of Data
Extracting Information and Features From
Lidar Data

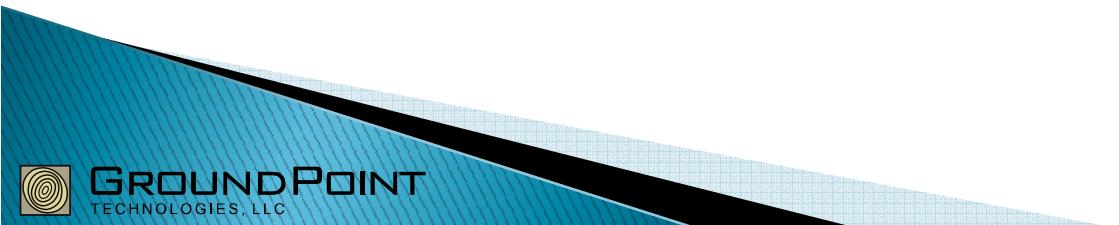
Karen Kwasnowski



GROUNDPOINT
TECHNOLOGIES, LLC

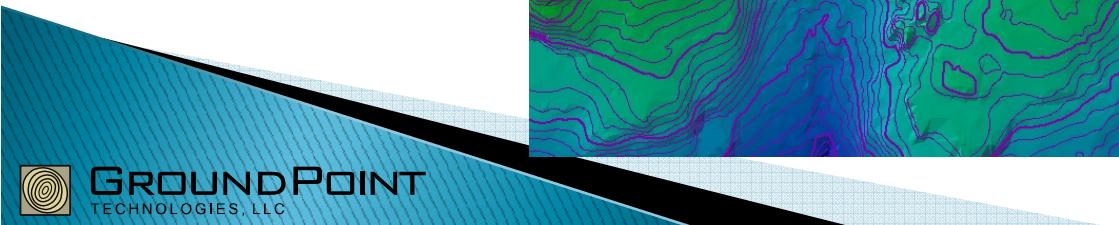
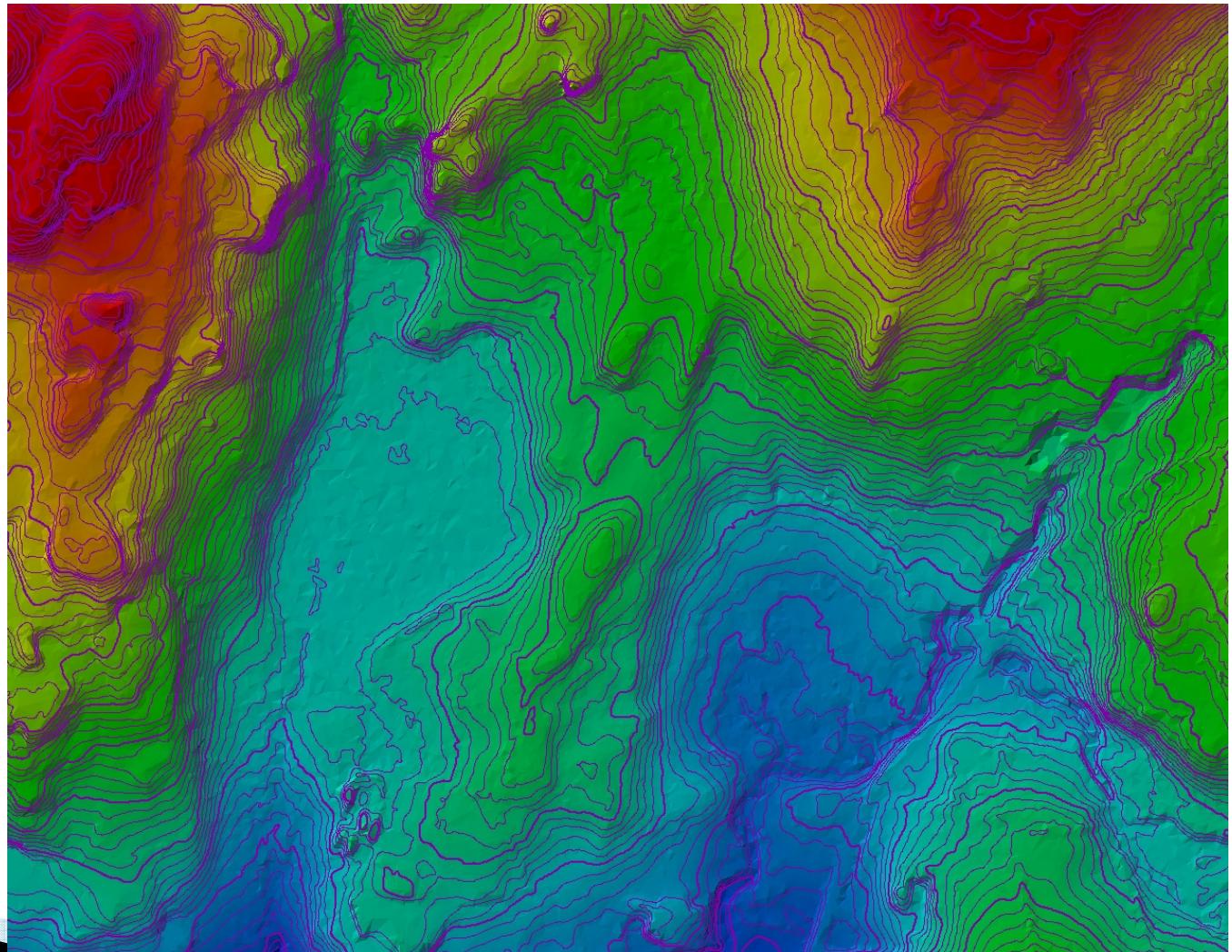
Today's Topics

- ▶ What does Lidar data look like?
- ▶ Errors in the Lidar data
- ▶ Integrating other datasets in with the Lidar
- ▶ Extracting Information from Lidar



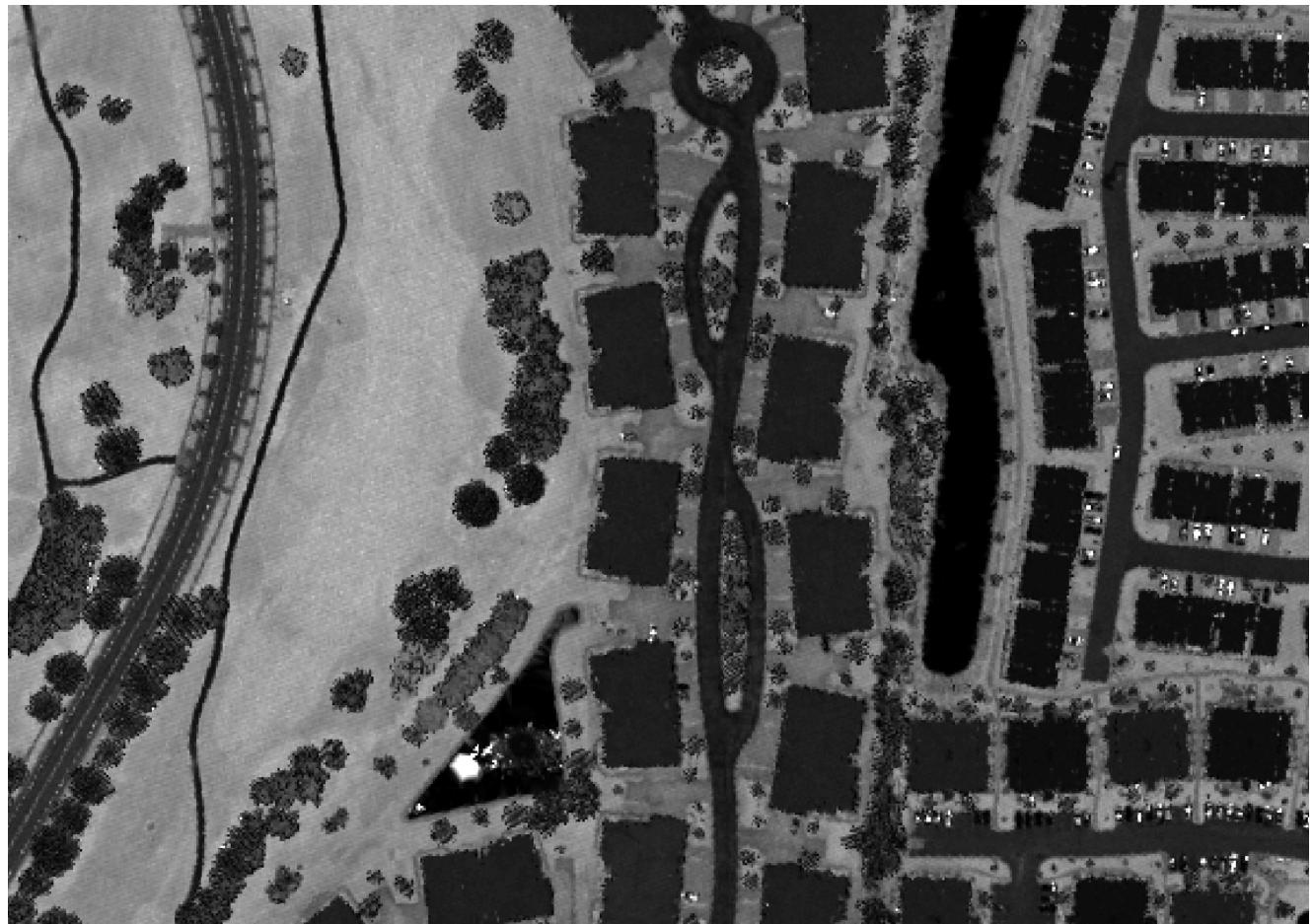
Extracting Information

- ▶ Contours



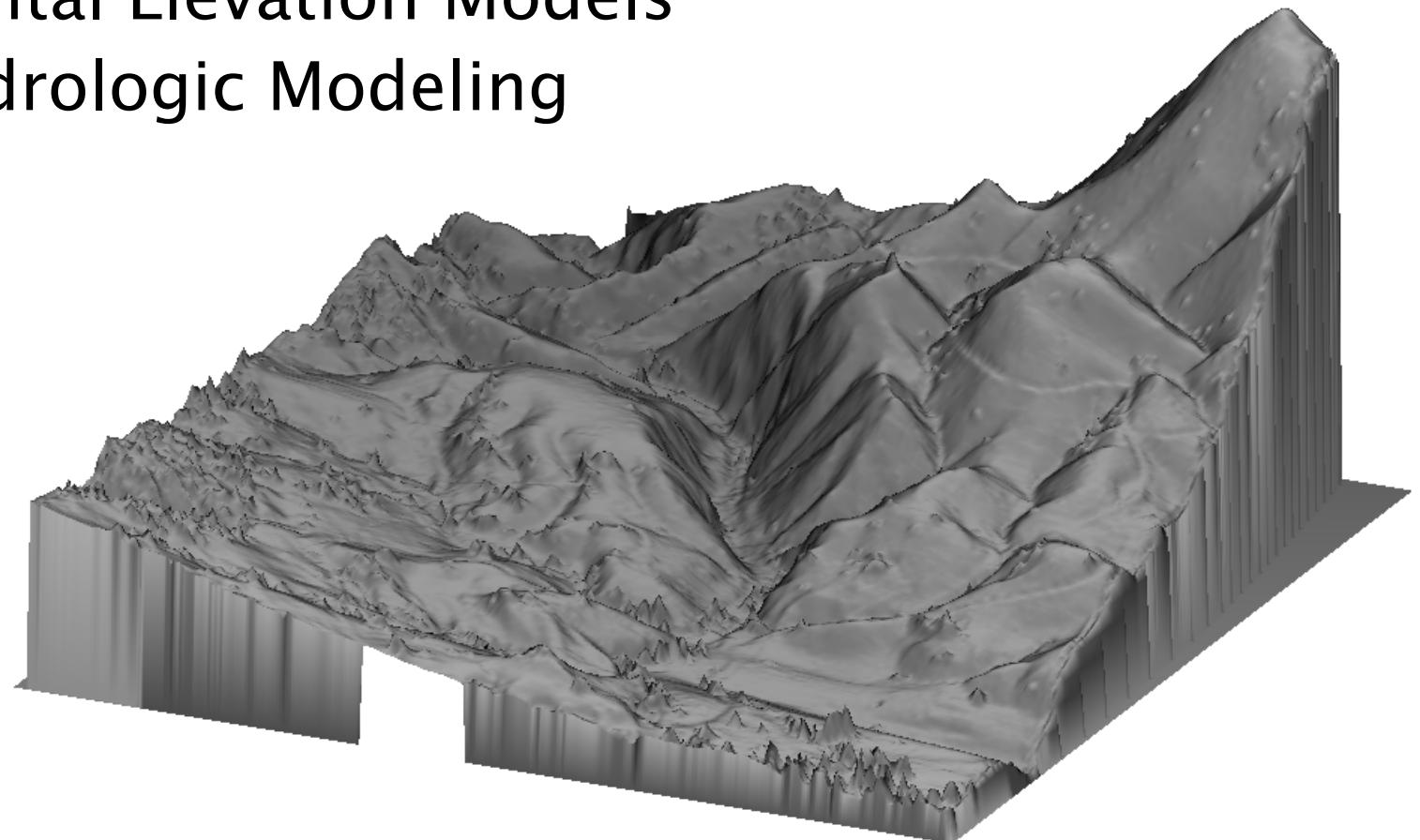
Extracting Information

- ▶ Intensity
Raster
Images



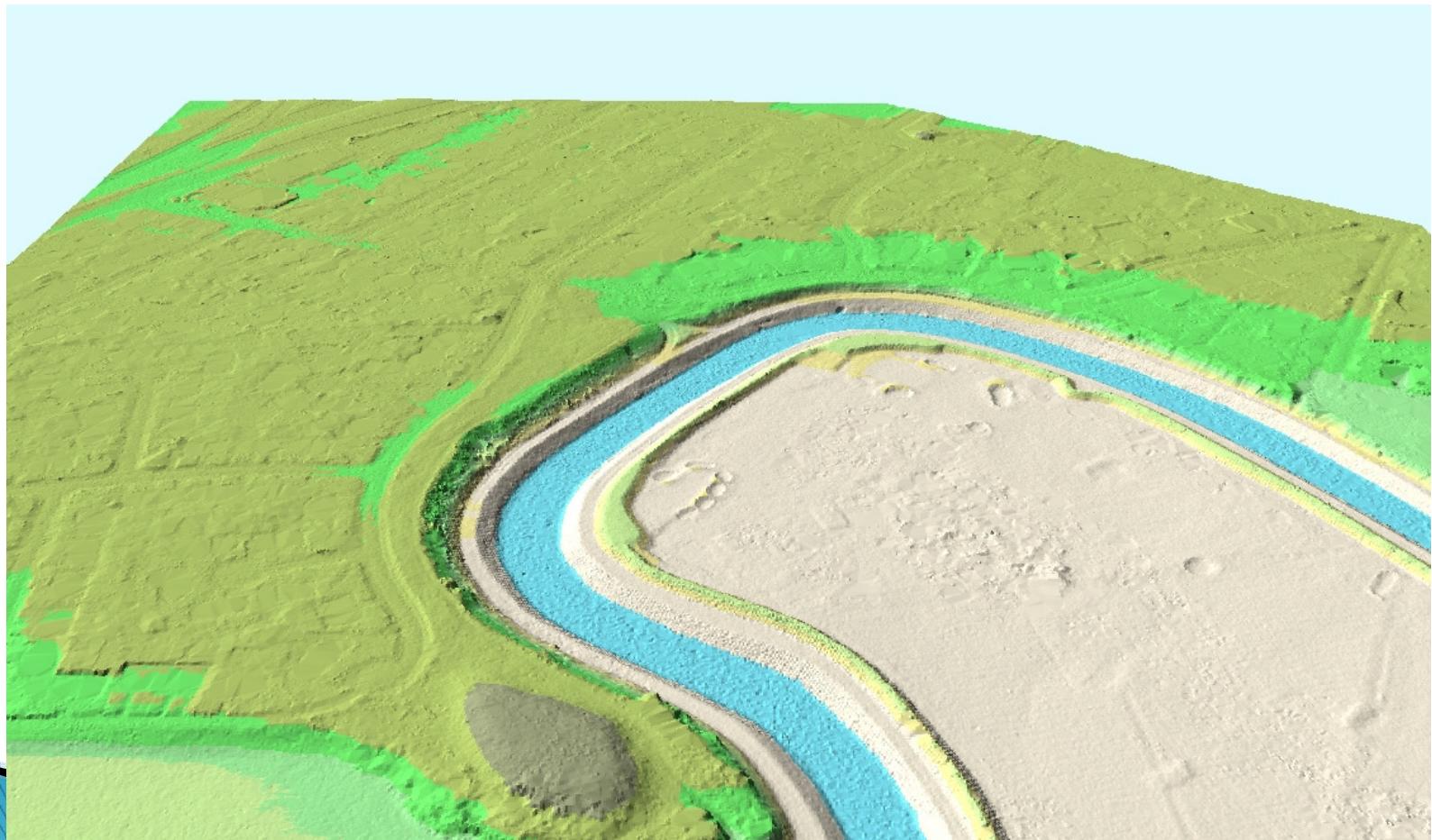
Extracting Information

- ▶ Digital Elevation Models
- ▶ Hydrologic Modeling



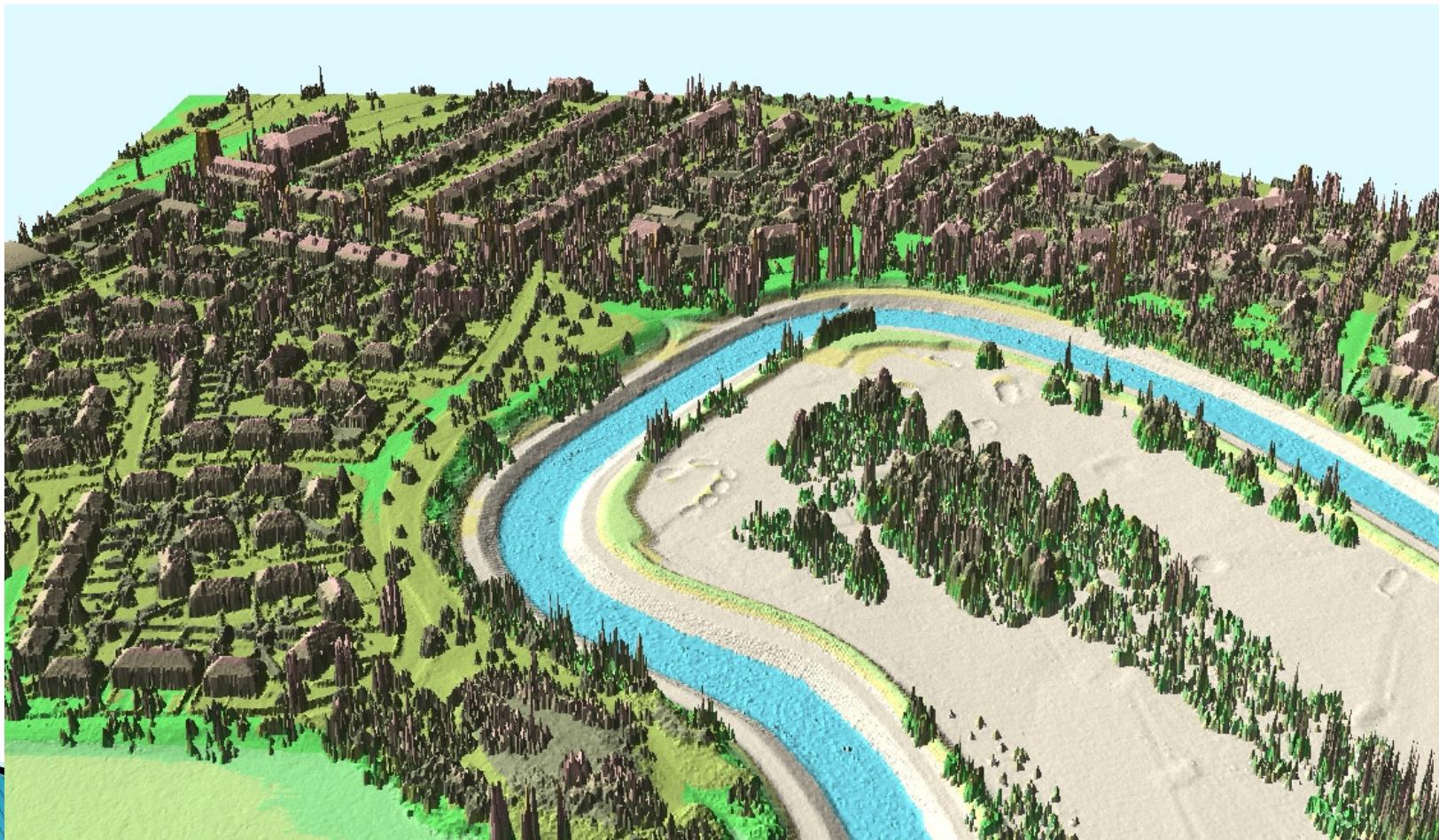
Extracting Information

- ▶ Digital Elevation Models



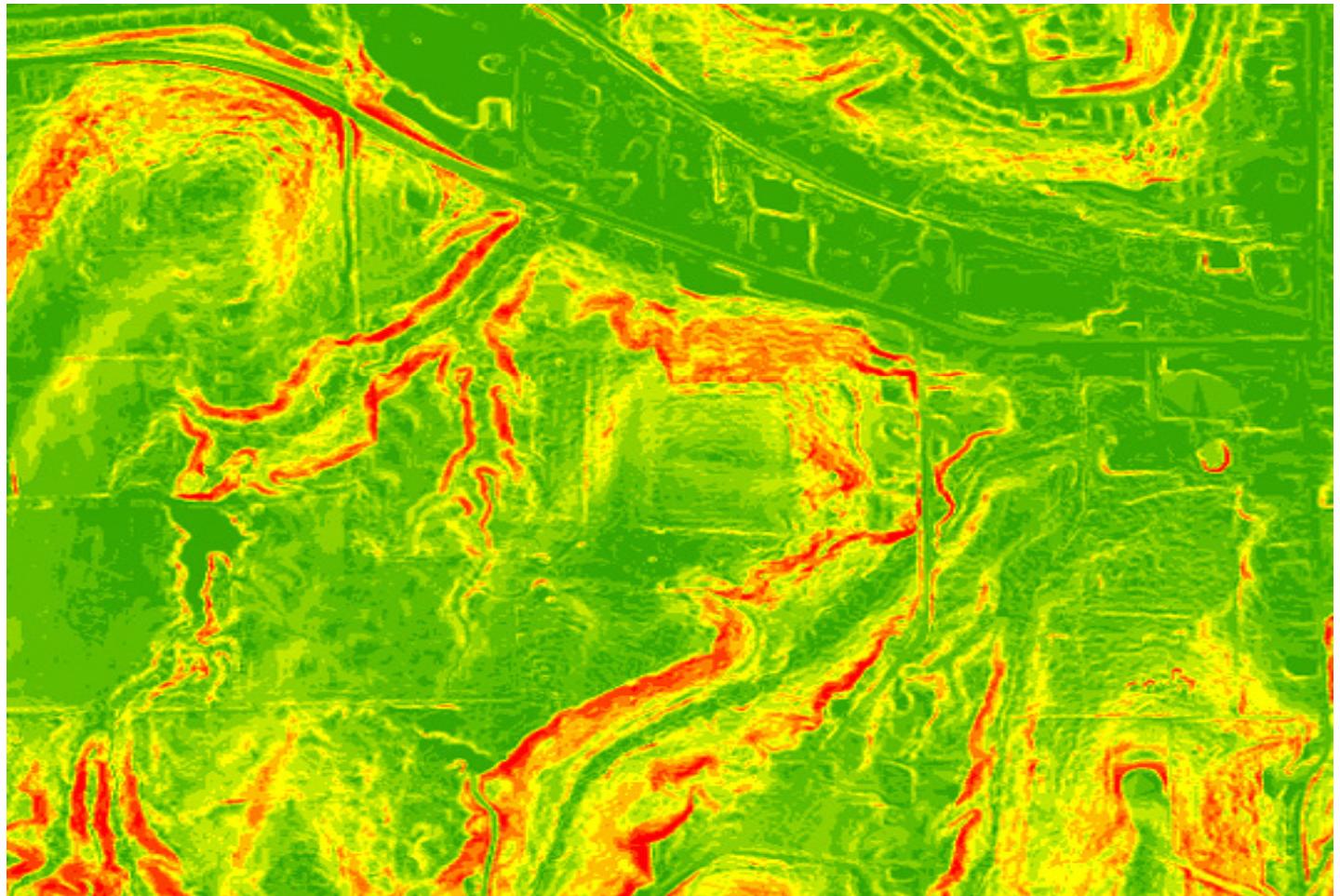
Extracting Information

- ▶ Digital Surface Models



Extracting Information

- ▶ Slope



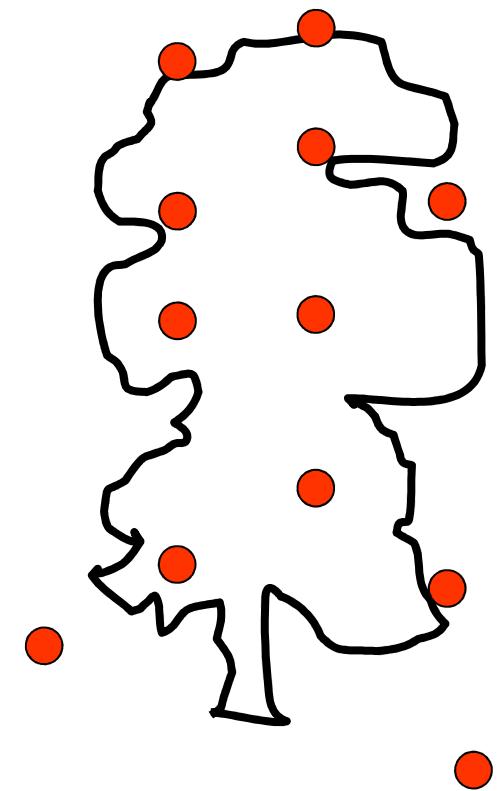
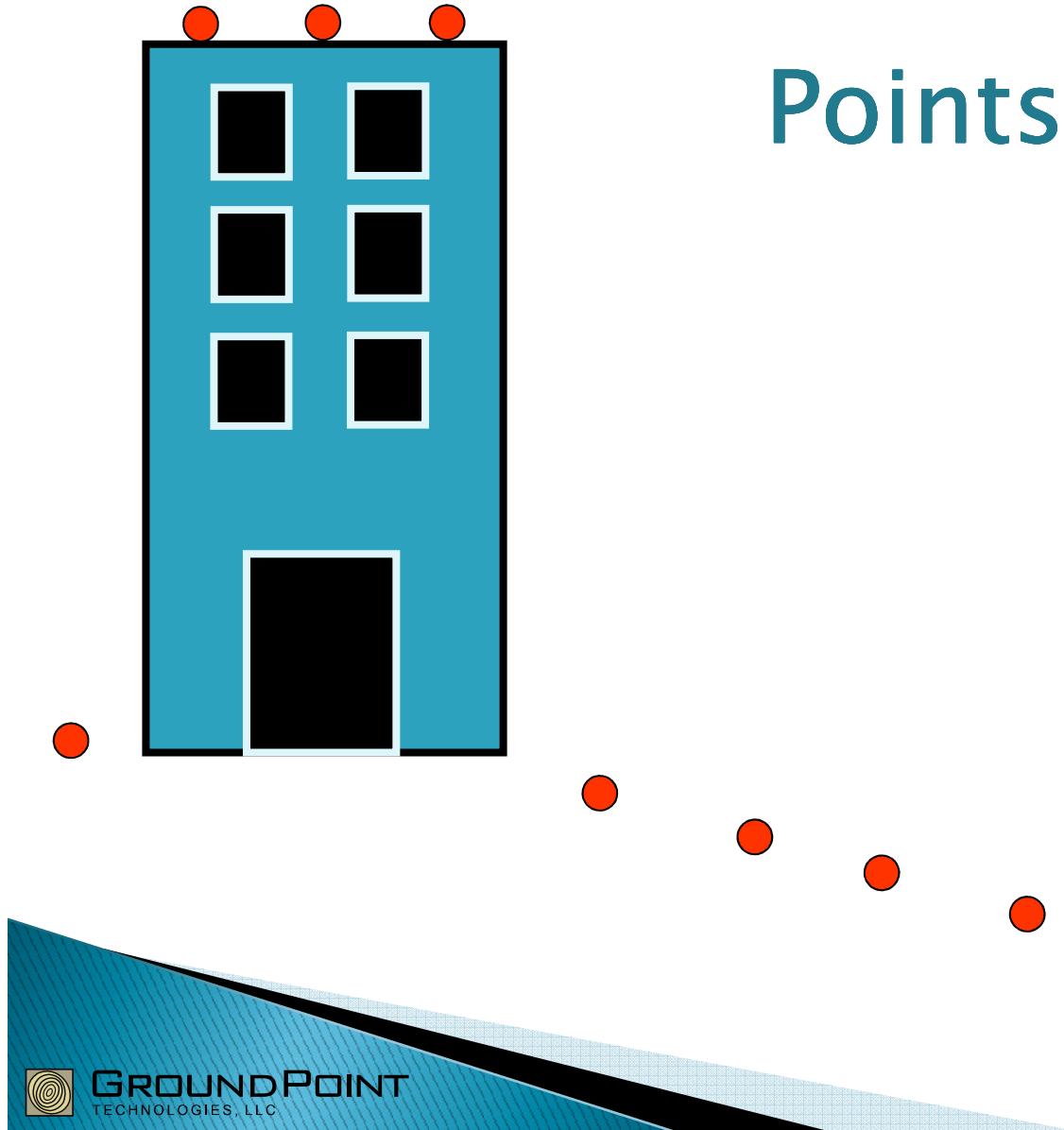
Extracting Information

- ▶ Analysis
- ▶ Directly from
the Point Cloud



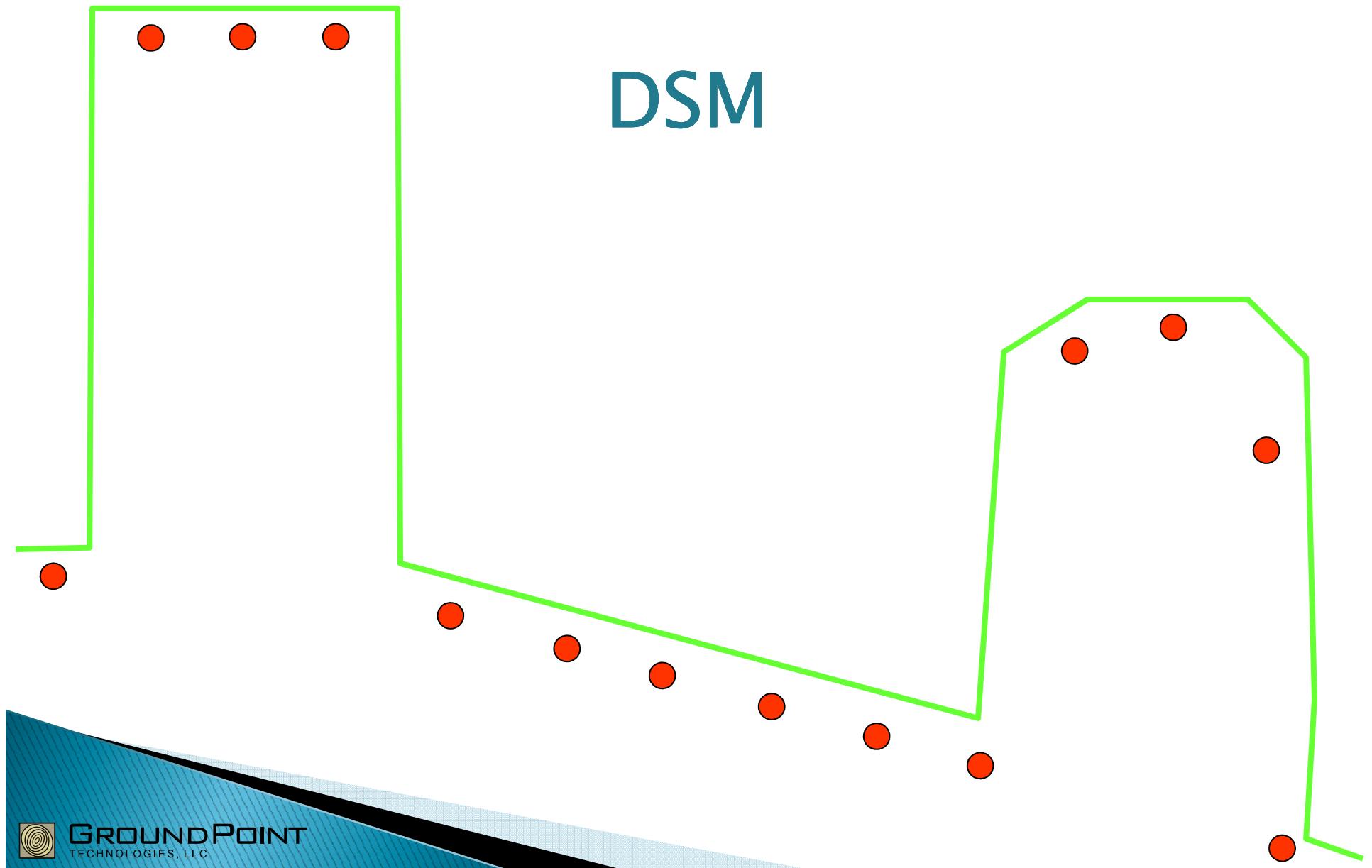
Extracting Information

Points



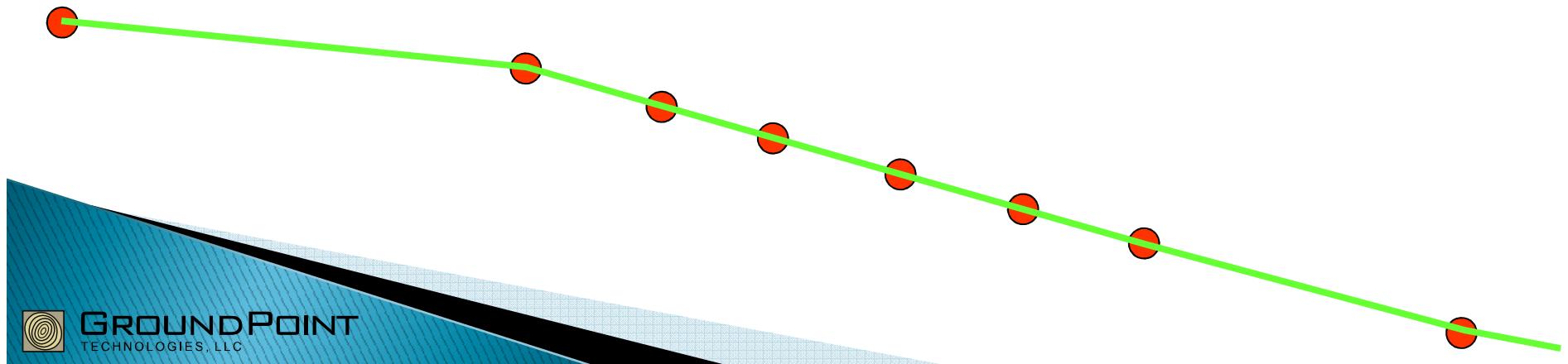
Extracting Information

DSM



Extracting Information

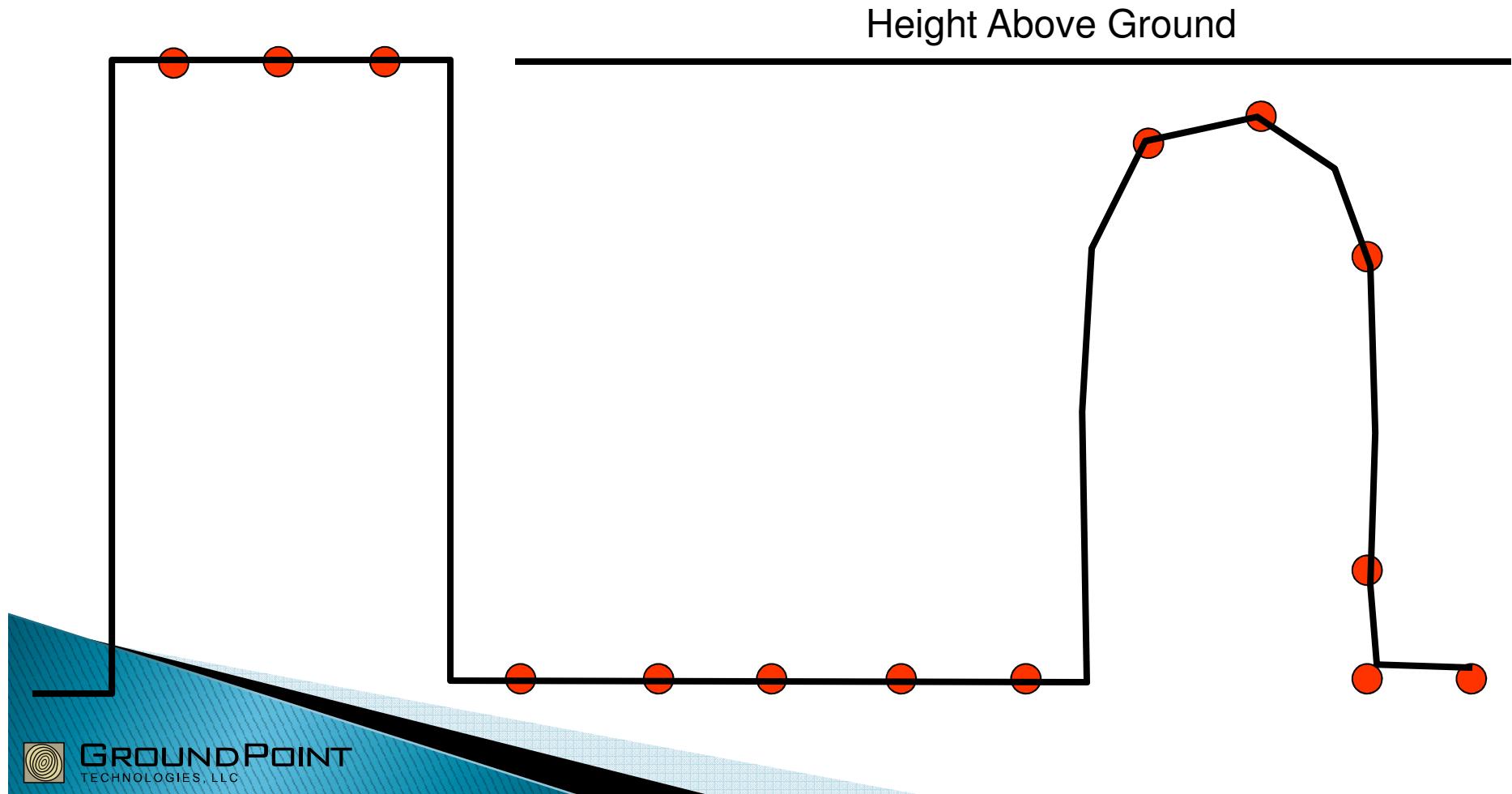
DEM



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Extracting Information

nDSM



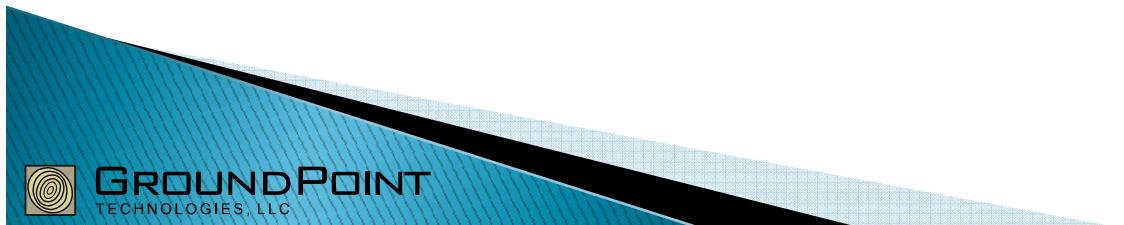
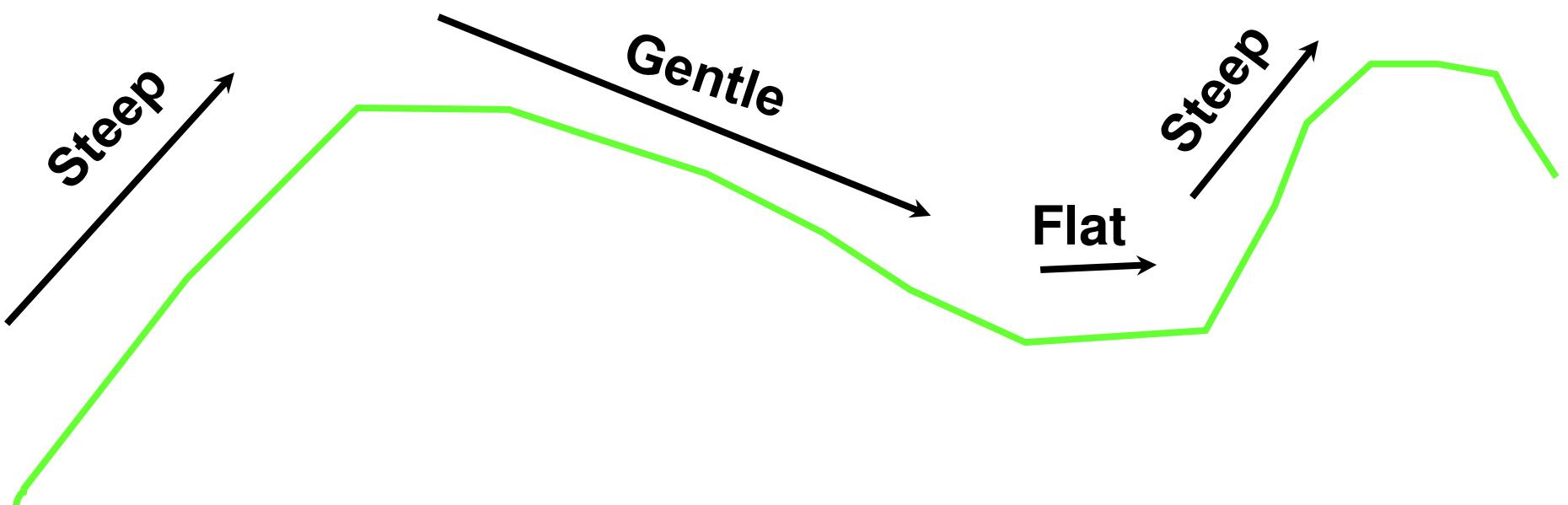
Extracting Information

Mean # Returns



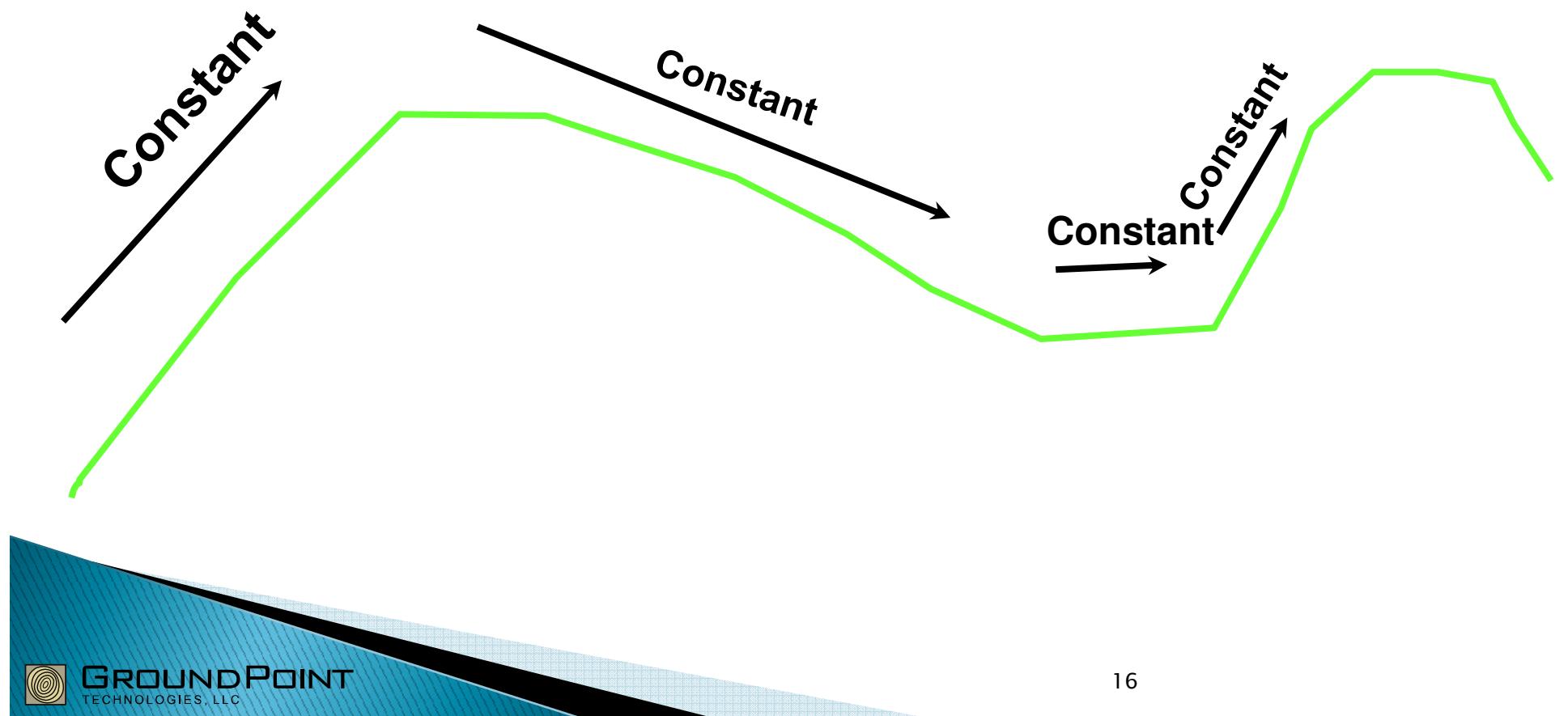
Extracting Information

Slope



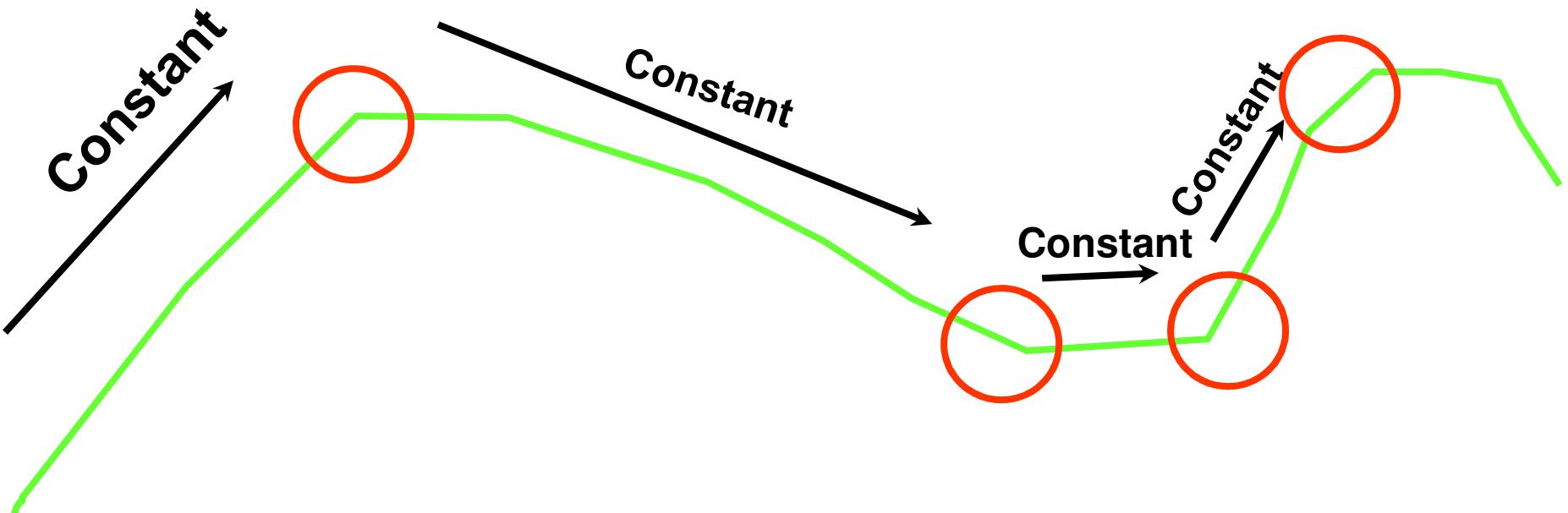
Extracting Information

\triangle Slope



Extracting Information

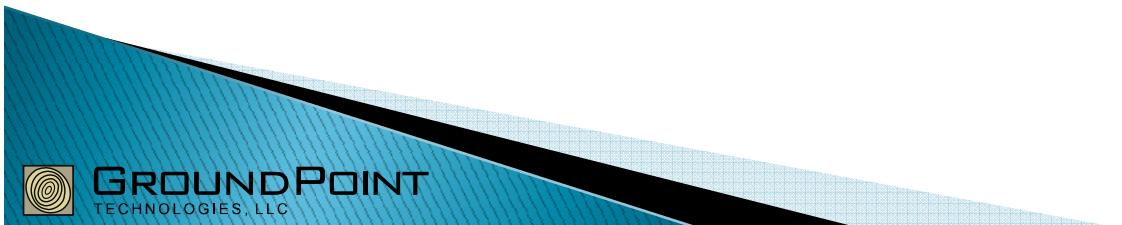
\triangle Slope



Extracting Information

- ▶ What do these data sets look like?

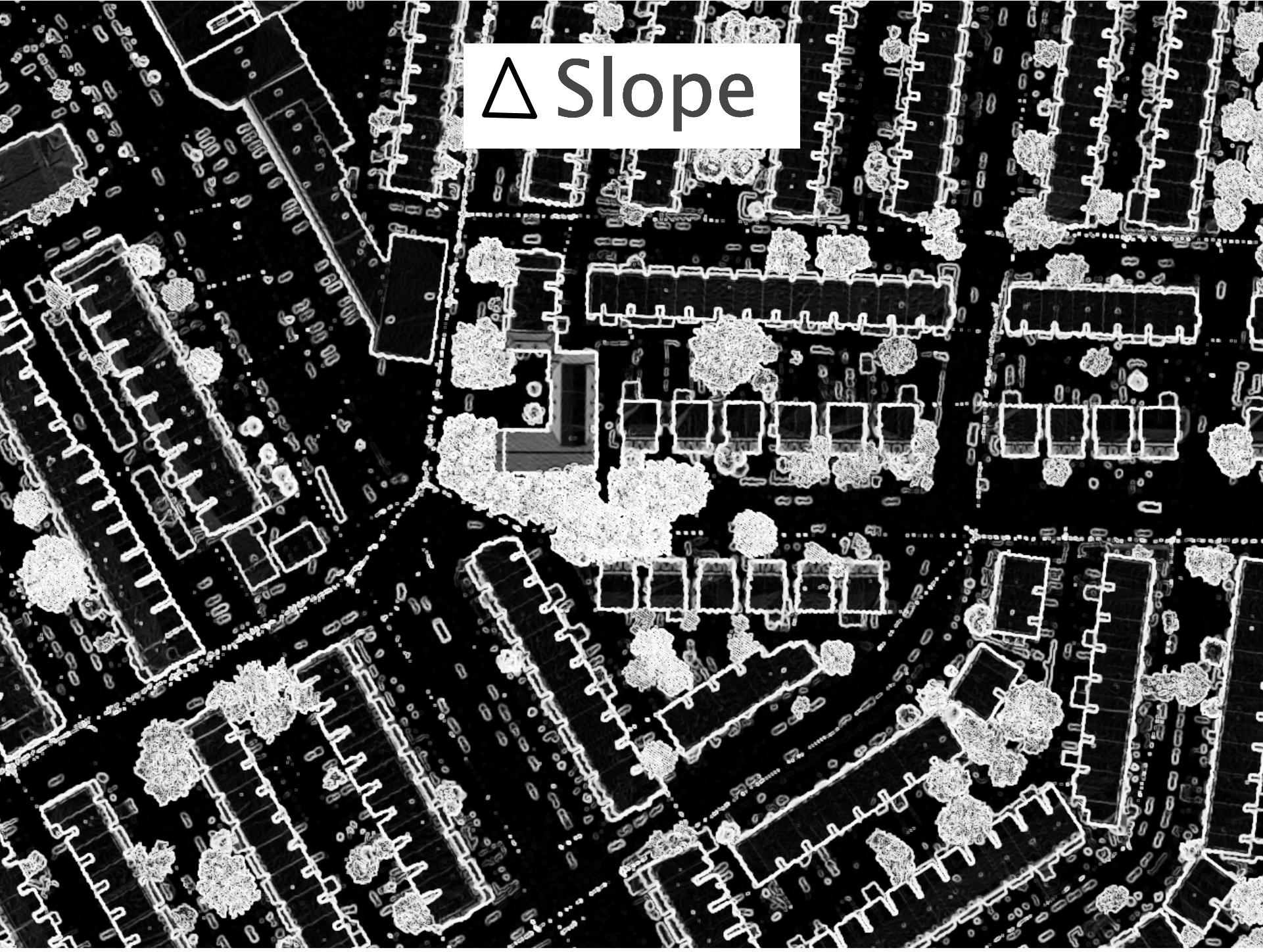
Mean # Returns
nDSM
 Δ Slope







nDSM



Δ Slope

Mean # Returns

